

CHAPTER SIX
PUBLIC FACILITIES & SERVICES ELEMENT

<u>CHAPTER SIX - PUBLIC FACILITIES & SERVICES ELEMENT</u>	<u>PAGE</u>
6.0 PUBLIC FACILITIES & SERVICES ELEMENT	237
6.1 INTRODUCTION	237
6.2 EDUCATION	237
6.3 ADMINISTRATIVE	239
6.4 CULTURAL	239
6.4.1 Library	239
6.4.2 Other Cultural Facilities	240
6.5 PARKS AND RECREATION	240
6.6 UTILITIES	244
6.6.1 Water	244
6.6.2 Electric	246
6.6.3 Solar	246
6.6.4 Gas	246
6.6.5 Solid Waste	247
6.6.6 Sanitary Sewer	248
6.6.7 Storm Drain	249
6.6.8 Streets	249
6.6.9 Cable Television	249
6.7 PUBLIC SAFETY	249
6.7.1 Police	249
6.7.2 Fire	250
6.7.3 Communications	251
6.7.4 Disaster Planning	251
6.7.5 Emergency Water Supply	252
6.7.6 Warning System	252
6.7.7 Surface Transportation Failure	253
6.7.8 Airport Safety Zone	253
6.8 GOALS	253
6.9 IMPLEMENTATION, POLICIES AND PROGRAMS	253

6.0 PUBLIC FACILITIES & SERVICES ELEMENT

The Goal of the Public Facilities and Services Element is to:

Provide and encourage, within economic capabilities, needed facilities and services that contribute to the City's safety, convenience, amenity, educational and cultural enrichment.

6.1 INTRODUCTION

According to the estimates from ABAG's Projections '90 for the years between 1990-2005, there will be an increase in the City's population of 10 percent; dwellings, 11 percent; and jobs, 21 percent. These increases will result in a proportionate increase in demands on public facilities and services performed by the City of Santa Clara and other agencies. As a result, increases in the staffing and operating budgets may be necessary to maintain the current levels of service.

In addition to the statutory general plan requirements listed in Government Code Section 65302, the City of Santa Clara has also addressed a number of other public facilities and services issues in the following text. And as a reminder, the reader/user is advised to look at the General Plan as an integrated whole, since issues that are addressed in this element also overlap and intertwine with other elements such as Land Use, Housing, Transportation, and Environmental Quality.

6.2 EDUCATION

Educational facilities within the community consist of 13 elementary schools, two middle schools, two high schools, several private schools, one private university and one community college.

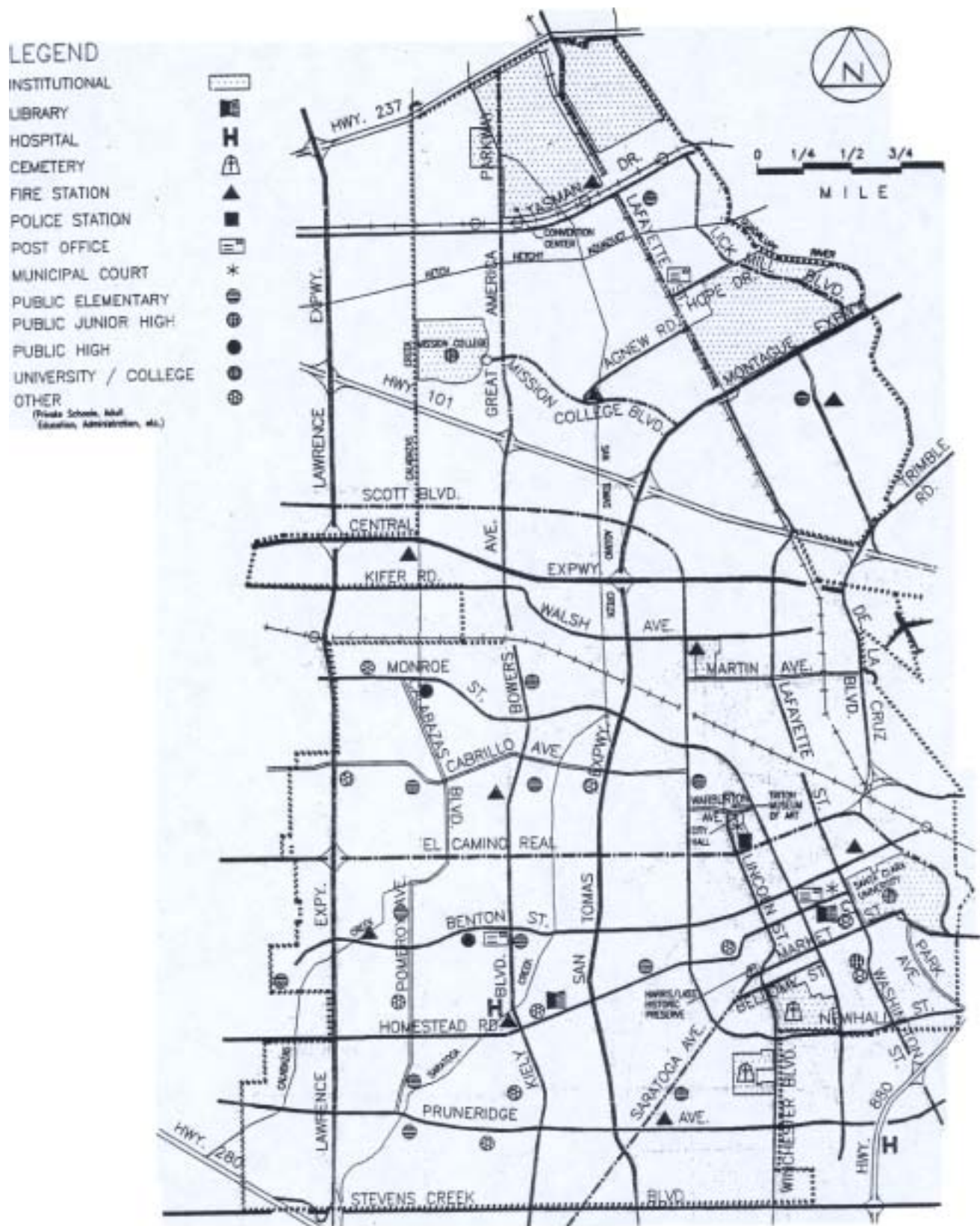
All of the public schools have adjacent recreation areas available for public use and generally meet the following acreage standards: 10 acres for elementary, 25 acres for middle schools and 40 acres for high schools.

The Santa Clara Unified School District covers an area of approximately 56 square miles and serves parts of Sunnyvale and San Jose as well as most of the City of Santa Clara.

The Cupertino Union School District serves the southwest corner of Santa Clara, with one elementary school and one closed school within the City limits. The Fremont Union High School District also serves the southwest corner of Santa Clara, but does not have any schools within Santa Clara.

The Campbell Union School District and Campbell Union High School District serves the southeast corner of the City, but does not have any schools within Santa Clara City limits.

EXISTING PUBLIC FACILITIES



The Santa Clara Unified School District hit its peak enrollment in 1968 with almost 24,000 kindergarten through twelfth grade students. Following the national decline in the birthrate in the 1960's, the local student population also decreased and has stabilized at about 12,500.

In 1990, the Santa Clara Unified School District maintained twelve elementary schools, two middle schools, two high schools, a continuation school, an adult education center, two Children's Centers, a Preschool Program, and the Extended Day Care Program within the City of Santa Clara. Surplus property has been sold or leased to provide an additional source of funding for a variety of programs to ensure local children the best educational opportunities. Some closed school sites are retained for future expansion, if needed.

In the future, if there are more closures of public schools, their conversion to other uses will impact the amount of recreational space within the surrounding community. Particularly affected will be the children in organized sports.

The City has a prestigious institution of higher learning in Santa Clara University. Its history has been closely linked with that of the City and it occupies a prominent site in the center of the downtown area. A recent expansion and consolidation of the campus has been completed and gradual facility construction is expected over the next fifteen years.

A second local college is the West Valley Joint Community College District, Mission College Campus. At full development, this campus is planned to serve 10,000 commuting students.

6.3 ADMINISTRATIVE

Completed in 1965, the Mission style Civic Center houses the administrative facilities of the City including a city hall, police administration building and court house.

6.4 CULTURAL

6.4.1 Library

The goal of the Santa Clara City Library is to select, collect organize, administer, and make readily available materials and resources which will assist individuals and groups to keep pace with progress, to improve job skills or acquire new ones, to continuously develop social and political skills, to make profitable use of leisure time; and to provide the service and assistance needed by its users so that they will obtain the most practical use of these materials. Cooperative planning and programming with schools, civic and cultural groups, City departments, and other libraries in the area are essential to meeting the library's goals.

The facilities devoted to meeting the library's goals are the Central Library on Homestead Avenue, the Mission Branch Library on Main Street and the Bookmobile. A second branch library, to serve the residents north of Bayshore, has been proposed. City library resources are heavily used, particularly at the Central Library site. This results in increased library patronage each year, one of the largest circulation and reference counts in the State for libraries the same size as Santa Clara's.

Because of the increasing demands placed on the resources of the library, it is important for the City to plan for the continued efficient development of Santa Clara library services. The collections, physical facilities, activities, staffing levels, technology and financial support should be monitored and evaluated in order to fulfill the present and future library needs of the citizens of Santa Clara. Two specific concerns which should be addressed are: planning for the time when the Central Library facility will reach its seating and shelving capacity; and meeting the service demands of the citizens who live north of Bayshore.

6.4.2 Other Cultural Facilities

The Triton Museum of Art recently completed the first phase of a new facility to exhibit and teach the arts. The Triton is strongly supported by the City through provision of a site adjacent to the Civic Center and operating subsidies.

The Harris/Lass Preserve has been purchased and restored by the City and Preservation Society to provide a community resource which demonstrates the City's history as a farming community. This farm house and accompanying farm buildings are available for demonstrations and field trips by Santa Clara Unified School District students, as part of their studies of local history.

The Mayer Theater at the Santa Clara University has two professional quality theaters to house University productions. One is a studio type theater and the other is a larger facility with a flexible main stage. The University also operates the De Saisset Museum for the public's benefit.

The City's Community Recreation Center, located in Central Park, includes a multi-purpose room with a stage and specialized instruction space for many crafts.

The City of Santa Clara Convention Center, at Great America Parkway and Tasman Drive, provides major exhibition and conference space for regional events, benefiting both residents and the local economy. The center includes a 600 seat theater, which is used part of the year by Santa Clara Ballet. The facility also has a stage which is not improved for fine theatrical productions.

There is no community theater in Santa Clara, although there is a Community Theater group, the Santa Clara Players. Children's Theater productions are staged at the Community Recreation Center at Central Park.

6.5 PARKS AND RECREATION

The City of Santa Clara has a very active Department of Parks and Recreation that has made maximum use of its available funds. In 1991 there were 27 parks in the City, the largest being the 52-acre Central Park. The neighborhood parks are evenly distributed throughout the residential areas. The Public Parks and Recreational Facilities Diagram displays the approximate locations of the parks and recreational facilities. The accompanying list further describes the City park system and its facilities.

The neighborhood parks range in size from one acre up to 10 acres. The small size of many of the City's older parks is compensated for by their convenient locations and degree

of development. The majority of local residents are within an easy walk of at least one neighborhood park with typical facilities of a tot lot, open area for games, and picnic tables. The Department of Parks and Recreation also maintains a strong recreation program that supports a wide variety of activities ranging from a Senior Citizens Center to the International Swim Center, training site for Olympic swimmers and divers. Through programs like Little League, Lions Football, Police Activities League tennis and swimming, the recreation facilities are kept in constant use by all segments of the City population.

The City system is augmented by the facilities of the local school districts. Almost all of the elementary schools provide, as a minimum, space for a softball field, two basketball and two volleyball courts, and grass playground for free play on a 10-acre site. The elementary school playgrounds are never locked. Intermediate schools have at least one baseball and one football field, 8-10 basketball courts and a large gym. The high schools have the same facilities plus a swimming pool and gym seating 700 people. All of these facilities are available to the City recreation program and private groups when not needed by the school district.

The closure of some public schools and their conversion to other uses has reduced the amount of recreation space in Santa Clara. Particularly affected are children in the organized sports like Little League and Police Activities League, which use the school play fields.

In 1969, during peak school enrollment, the City had one acre of play area per 55 children. By 1978, due to declining enrollment, the ratio had reached one acre per 36 children. From a City wide acreage perspective, the loss of some school playgrounds is not critical. The major concerns are more specifically related to the schools' actual users and the neighborhoods' alternative play areas.

Figure 6-B:

PUBLIC PARKS AND RECREATIONAL FACILITIES



Figure 6-C: PUBLIC PARKS AND RECREATIONAL FACILITIES

PARKS	PICNIC	B.B.Q.	RESTROOMS	SOFTBALL FIELDS	BUILDING	TENNIS COURTS	SWIMMING POOLS	PLAY AREAS	BASKETBALL COURTS	BASEBALL FIELDS	INDOOR SPORTS MISC. CLASSES
Agnew Park	X	X	X		X			X	X		
Bowers Park	X	X	X		X			X			
Bracher Park	X	X	X					X			
Central Park	X	X	X	O	X	O		X	O		X
Community Rec. Ctr.			X								
Int'l Swim Center			X				X				
Tennis Center			X			O					
City Plaza Park											
Civic Center Park											
Everett Alvarez Park	X	X	X			X		X			
Fairway Glen Park	X										
Fremont Park											
Senior Citizens Center											
Henry Schmidt Park	X	X	X	X	X	O		X	X		
Homeridge Park	X	X	X		X	O		X	X		
Homestead Park	X	X	X			X		X			
Jenny Strand Park	X	X	X			X		X			
Lafayette Park			X	O	X	X		X	X		
Lick Mill Park	X	X	X		X	X		X			
Machado Park	X	X	X			X		X			
Mary Gomez Park	X	X	X			X					
Swim Center	X	X	X		X	O	X				
Maywood Park			X								
Memorial Cross Park			X	O						X	
Mission College											
Sports Center											
Montague Park	X	X	X		X	X		X			
Montague Swim Center											
Parkway Park	X	X	X					X			
Rotary Park											
Steve Carli Park		X	X					X	X		
Warburton Park			X					X			
Swim Center							X				
Washington Park											
Elmer Johnson Field				O						O	X
Westwood Oaks Park		X	X		X			X			X
Youth Activity Center	X		X		X						

O = Night Lighted

In 1975, the City formed a Sports and Open Space Authority that acquired Fairway Glen, a 104-acre, 18-hole golf course, which operated as a public course supported by user fees. This facility has been closed and replaced by a new 150 acre 18-hole public course on the City's landfill. This facility is the Santa Clara Golf and Tennis Club, north of Tasman Drive, west of Lafayette Street. The City's other golf course, Pruneridge Farms although privately owned, is open to the public and has been preserved through a scenic open space easement agreement with the owner.

The residential area of the City south of the Southern Pacific Railroad is almost all developed. The few remaining privately owned parcels are so high-priced that acquisition cost for park purposes are prohibitive. The undeveloped land north of the Bayshore is unsuitable for neighborhood parks due to the distance from most residential areas. With good access, however, it is suitable for specialized or larger scale open space and specialized recreation facilities to which users would normally expect to travel longer distances. It is also available for people who work in that area.

If further closed school sites are approved for sale by the districts, the City may consider purchasing the most critical recreational areas to be maintain for public use or the City may retain the existing General Plan designation for educational use. Because these sites are already publicly owned, the City has contributed to the maintenance of closed school sites in preference to acquiring them.

The City's two flood control retention basins also have potential for enhancement through landscaping. Because of their location adjacent to the Baylands, the basins have become a feeding and resting place for a variety of bird species.

Recreation space for major sports events is available at the University of Santa Clara's Buck Shaw Stadium and at the Student Activities Center. Mission College will have spectator facilities at its track and football field. The City participated with the College in constructing a major softball facility with four fields.

The possibility still exists for consideration of a major public sports facility in the Bayshore North area. A site still available is at the southeast corner of Route 237 and Great America Parkway.

6.6 UTILITIES

6.6.1 Water

The City of Santa Clara Water Utility is responsible for planning, designing, constructing, operating and maintaining the municipal water system. In 1989, the system consisted of 307 miles of distribution mains, 22,960 metered service connections, 2,875 fire hydrants, 617 fire service connections, 28 wells, three booster pump stations, seven storage tanks with a combined capacity of 27.3 million gallons, two pressure connections to the City of San Francisco's Hetch-Hetchy system (treated water imported from the Sierras), and one pressure connection to the Santa Clara Valley Water District (treated water imported from the Sacramento-San Joaquin Delta). The total pumping plant comprises 4,900 horsepower, with a pumping capacity of 47,700 gallons per minute. In 1988, the system served 10,005 million gallons of water to a population of 90,879.

The City's projected water demand for the year 2005 is 12,000 million gallons, a 20 percent increase over 1988. Water supply will be a pivotal issue in the City as well as in the Santa Clara Valley during the life of this Plan. New sources or increased supplies will be extremely costly and difficult to develop. Periodic, multi-year droughts such as those experienced in 1975-77 and again in 1987-90 may further impact the ability to satisfy increasing water demands of population growth and industrial expansion. An era of water development is giving way to one of water management. The City must move in the direction of more efficient utilization and management of existing water supplies. Economics will play a key role in determining best water use practices.

As with other commodities, water pricing will be greatly influenced by supply and demand. The popular view is that the incremental cost of new or increased water supplies should be borne by those responsible for the increased demand. Of necessity, processes requiring intensive use of water will gradually give way to those which require far less.

There will also be an increasing focus on water quality. As a result of amendments to the federal Safe Drinking Water Act, water quality standards and treatment requirements will become even more stringent. Implementation of new monitoring requirements and "best available technology" treatment techniques will have a considerable effect on the cost of water.

Reclaimed water is available for limited uses in certain areas north of the Bayshore Freeway. The City's reclaimed water delivery system can supply up to 3.6 million gallons per day of highly-treated wastewater from the jointly-owned San Jose/Santa Clara Water Pollution Control Plant. Use of reclaimed water for permitted types of landscape irrigation will conserve potable water for more appropriate purposes.

Water conservation is a method for managing water resources on a long-term basis. Long-term measures require a somewhat different planning approach than do short-term measures. The City can reduce water use in a variety of ways including development standards, building requirements (such as water saving devices in new construction), water rates, landscape design guidelines and wastewater reclamation. To ensure successful results over the long term, all conservation programs must be carefully planned, well managed and properly monitored with a good public education effort.

To meet additional water demands, the City will rely primarily on imported water because groundwater has already reached the maximum safe yield. Growth will occur primarily in the northerly part of the City. A major water transmission main should be constructed to move water from the southerly part of the City to north of the Bayshore Freeway if the City's contract with San Francisco remains temporary and interruptible. Improvements to Santa Clara Valley Water District's Santa Clara Distributary should be undertaken to provide more water to the southerly portion of the City.

The future cost of water service will be significantly increased because of the limited available water resources and increasing Federal and State regulatory compliance requirements. However, the City of Santa Clara Water Utility will establish fair and equitable fees, rates and charges which will provide revenue sufficient to maintain the fiscal integrity of the Utility as growth continues.

The main discussion on water issues, policies and programs is in the Environmental Quality Element.

6.6.2 Electric

The City's Electric Department operates a network of substations and distribution lines to supply local power needs. Electricity is produced and purchased from a variety of sources such as the City's own units and participation in Joint Action Agency Projects, cogeneration suppliers, Federal Power Marketing Agency and private entities. The "fuels" for these resources are wind, water, geothermal, coal, gas and oil.

The City continues to investigate additional resources to provide low cost power for its citizens and business customers as required. Current generation projects actively being pursued are cogeneration, hydroelectric, out-of-state purchases, and natural gas.

The City has identified system requirements to meet a projected City demand of 558.5 megawatts (MW) or an approximate 158 MW increase from the 1988 demand of 400 MW. Based on an average energy usage for commercial/industrial space of 8.4 watts/sq.ft., the City's Electric Department has sufficient resources over its nine year planning horizon to accommodate approximately an additional 18.8 million square feet of commercial/industrial space. The necessary distribution station sites and transmission routes have been generally identified and, with City approval of the specific locations, the City of Santa Clara can accommodate this level of demand.

Distribution lines are typically undergrounded as part of new development or redevelopment.

6.6.3 Solar

In 1975 the City of Santa Clara took a leading role in the development and promotion of the use of solar energy. Since the City operates its own electric utility, as well as water supply and sanitary facilities, the City is especially concerned about the increasing costs and diminishing supply of conventional energy sources.

This concern has resulted in the City's use of solar systems and in the establishment of the nation's first municipal solar utility. Under this program the City will supply, install and maintain solar water heating systems for residents and businesses within Santa Clara, recovering the costs through monthly utility charges.

The City has also installed solar energy equipment at its own municipal facilities. Central Park has two of the largest solar systems in the country: the Community Recreation Center heating system and the International Swim Center solar heated pool.

6.6.4 Gas

PG&E has full natural gas distribution facilities within the City of Santa Clara. Current usage of approximately 92,000,000 therms is not anticipated to change significantly, based upon projected growth in Santa Clara from 1990 to 2005.

In addition to natural gas, PG&E has electric transmission facilities that provide wholesale power to the City of Santa Clara.

Air Products & Chemicals, Inc. owns and operates a large industrial gas plant in Santa Clara. Air Products supplies and delivers nitrogen to the electronics industry through their Silicon Valley nitrogen pipeline network supplied by plants in Santa Clara, Sunnyvale, and Mountain View.

Individuals should contact PG&E, Air Products and Underground Service Alert for more detailed information about services and products, and location of pipelines.

6.6.5 Solid Waste

Solid waste collection and disposal is another critical public service because of environmental concerns. Past disposal practices like dumping and open burning have been halted due to the resulting air and water pollution and the lack of suitable sites.

In 1988, an estimated 700 tons per day of refuse was generated in the City of Santa Clara. City crews collect approximately 8 percent of the volume through its residential rubbish collection and annual Clean-Up Campaign programs. Private collectors, franchised with the City, collect a total of approximately 65 percent of the volume from commercially zoned areas (22 percent), industrially zoned areas (38 percent), and residentially zoned areas (5 percent). Self-hauling by private businesses, the public and institutionally zoned organizations account for the remaining 29 percent. Only 520 tons per day is deposited at the City's All Purpose Landfill; the remainder is either recycled or disposed of at other landfill sites outside the city limits.

In the 1960s, the City acquired several hundred acres of low-lying land in the northeastern corner of the City to accommodate its nonhazardous waste landfill disposal needs. This site's capacity will be depleted in the early 1990s. The City has secured landfill disposal capacity for all the City's solid waste until the year 2019 through an agreement with the owner of the Newby Island Landfill located in San Jose approximately five miles northeasterly of the existing City's landfill. All the refuse will be recycled or diverted to Newby Island when the City's landfill site closes.

The Newby Island Landfill site will have a Recyclery Center to recycle a significant portion (approximately 25 percent) of the incoming refuse, reducing the actual amount of refuse to be landfilled. In addition, a residential curbside recycling program is expected to reduce the solid waste volume by 3 percent.

On most of the existing City landfill areas, the City has constructed a major golf course. This use provides recreation while assuring continuing maintenance of the completed landfill site. The completed landfill area has a landfill gas collection and conversion system. This system collects and converts the landfill gas into approximately 800 kilowatts per hour of electricity.

Resource recovery and recycling refuse are an important part of the City's future solid waste management system. The City has been working with the Santa Clara County Intergovernmental Council and other cities to meet a county-wide goal of 25 percent diversion and recycling of the waste stream generated. Increased levels of recycling are planned to be achieved through the implementation of more individual commercial / industrial waste recycling programs, residential curbside recycling, public and private composting, and recycling at the landfill site. State legislation in 1989 set a mandatory

recycling level of 25 percent by 1995 and a recycling goal of 50 percent by 2000 which will require substantially more stringent efforts to achieve.

A solid waste transfer station or transfer/recycling plant is proposed for construction and completion in 1993. The purpose of this facility is to allow local solid waste collection vehicles to deposit their collected waste at a station in Santa Clara, and then reload the waste into larger vehicles for transport to Newby Island. This station would also serve the public and would be a more convenient location for disposal of their solid waste. Resource recovery utilizing waste-to-energy facilities and recycling at this station is being studied. Property for a future transfer station and waste-to-energy site is being held in reserve north of the proposed completed landfill limits, south of Highway 237, and west of Lafayette Street.

To help keep hazardous waste out of the municipal wastestream, the City publicizes and conducts household hazardous waste drop-off days for residents of the City. A periodic load inspection program at the landfill is conducted in an attempt to eliminate hazardous wastes from entering the landfill. The Environmental Quality Element contains a more detailed discussion of hazardous wastes.

6.6.6 Sanitary Sewer

The Sewer Utility is responsible for the inspection, operation and maintenance of the sanitary sewage collection system. The Utility also performs minor construction work and cleanout installation. The system in 1989 consisted of 261 miles of collector and transmission mains; 22,000 sewer lateral connections; 4890 manholes; 16 siphons; five lift stations and two pump stations. In 1988, the system collected and treated approximately 7.2 billion gallons of sewage. As of July 2006, the system has been expanded to include an additional 16 miles of sewer line (277 miles total); an additional 2, 400 sewer lateral connections and a new pumping station.

The San Jose/Santa Clara Water Pollution Control Plant near Alviso is a regional wastewater treatment facility serving eight tributary sewage collection agencies. The Water Pollution Control Plant is administered and operated by the City of San Jose's Department of Water Pollution Control. In 1989, the City of Santa Clara's share of the treatment plant capacity was 26.4 million gallons per day (MGD). It is anticipated that in 1993 the City's flow may reach 23.6 MGD, leaving a reserve capacity of 2.8 MGD. By 2005, the flow is expected to reach 25.8 MGD. The City of Santa Clara's projected growth from 1990 to 2005 will increase the average daily flow by 2.16 MGD and increase the peak flow by 5.4 MGD.

Based on 1989 flow measurements and more current 2007 hydraulic modeling data¹, the large interceptor mains and pump stations that convey Santa Clara's sewage to the treatment plant have adequate capacity for existing sewage flow. However, based on hydraulic modeling of the system, several sewer mains and collector lines are at or near capacity, and will suffer from capacity deficiencies to accommodate the increased wastewater flows generated from projects within the City that are contemplated by the current General Plan and that could be constructed through the years 2010 and beyond. These projected capacity deficiencies are based on the anticipated increased sanitary sewer flows resulting from the cumulative development and redevelopment projects and increased densities in mixed-use and transit-oriented areas that are consistent with and included as part of projected growth anticipated under this General Plan, but that may occur in years 2007 and beyond. The majority of deficiencies are projected to occur on the western side of the City along the 27-inch through 36-inch trunk sewer in Great America Parkway and Bowers Avenue and extending upstream into the smaller trunk sewers in Chromite Drive, Machado Avenue, Calabazas Boulevard and El Camino Real. The deficiencies are also attributable to the City's commitment to provide a defined volume of conveyance capacity for a portion of the City of Cupertino, based upon a contractual agreement when the City of Santa Clara purchased and existing sewer trunk line from the Cupertino Sanitation District some years ago. There are also some areas of predicted capacity deficiencies in the southeast portion of the City in Scott Boulevard and Park Avenue.

¹ RMC Water and Environment, Sanitary Sewer Capacity Assessment Draft Report prepared for the City of Santa Clara, dated May 2007

As such, new development projects that contribute sewer flows to those portions of the sewer collection system projected to have deficiencies may require selected improvements. The hydraulic modeling study completed by the City in 2007 includes recommended solutions to these capacity deficiencies. These solutions have been used to estimate capital improvement costs, which can be factored into the City's Capital Improvement Program and associated fee structure.

The evaluation of impacts upon the smaller collector mains will continue to depend on the location and type of development. Sewer mains near or adjacent to other large undeveloped or redevelopable parcels may have adequate capacity to accommodate most types of development on those sites; however, the type of development can radically impact reserve capacity within the conveyance system. The City's experience is that certain types of industry, e.g., printed circuit board manufacture and wafer fabrication, discharge very high volumes of wastewater in relation to their floor area - as much as 6 to 10 times more than most other commercial and industrial uses. It is a City requirement that new industrial, commercial and major residential development be reviewed to determine projected wastewater load and available sewer capacity before zoning approval or permits are granted. To the extent that additional sewer collection system improvements may be identified, such improvements will become the responsibility, in whole or in part, of those developing properties.

Cost of sewer service will escalate because of increasingly strict federal and state regulatory requirements on sewage treatment and disposal. Notwithstanding, the Sewer Utility will continue to establish fair and equitable fees, rates and charges to provide revenue sufficient to maintain the fiscal integrity of the utility. (Sec. 6.6.6, June 5, 2007)

6.6.7 Storm Drainage

Storm drainage facilities to service future development are not envisioned to require major capital expenditure. Most of the City has storm drainage facilities to accommodate infill development. There are, however, areas where local storm drainage facilities are needed, beyond the current City financing capabilities. Where new storm drainage facilities are needed to serve a development (typically City wide), the City, through its Development Ordinance, will cause construction of the necessary storm drainage facilities.

Local drainage facilities may require supplemental financing. The revenue from Storm Drain Development Fee is not adequate to maintain and/or supplement the existing system to the standards desired. In addition, major capital facilities may be required to reduce pollution in urban storm water run-off from entering into San Francisco Bay. An Assessment District or Enterprise Fund is under consideration to help finance the needed facilities.

6.6.8 Streets

In 1989, the City maintained 242 miles of streets, 399 miles of sidewalks, 13 public alleys and two major public parking districts. The City also sponsors an Annual Clean Up Campaign in the spring, Leaf Collection Project in the fall, the Christmas Tree Collection Project each January, the Parade of Champions and Fourth of July fireworks display.

The City's major street network is essentially in-place. Road widening to conform to adopted street plan line or widen sub-standard streets to accommodate increased traffic from new development will still be necessary. New streets within the boundary of a new development are the cost obligation of the developer.

6.6.9 Cable Television

Cable service is provided to citizens of Santa Clara through a non-exclusive franchise. The cable is underground in newer developed areas and on existing power poles in areas with overhead electrical service. More than 95 percent of the residences in the City have access to cable television.

6.7 PUBLIC SAFETY

6.7.1 Police

The Santa Clara Police Department performs the following functions:

1. Enforcing laws and ordinances.
2. Preventing crime and maintenance of peace and order.
3. Protecting lives and property.

4. Enforcing traffic laws and ordinances.
5. Maintaining the care of all property and equipment assigned to the police department.
6. Prosecuting violators of laws within the jurisdiction and in cooperation with other law enforcement agencies in other jurisdictions.
7. Preparing and maintaining necessary records and reports.
8. Performing all other related functions required and directed by the City Council.

The 1990-91 staff and operating budget allowed the City of Santa Clara Police Department to perform these functions satisfactorily. The City's goal is to maintain the level of service provided the community, i.e., to accomplish the eight functions listed above in a timely and efficient manner. It is the policy of the Police Department to respond to all emergency calls in under three minutes.

Increases in population, housing units, and jobs are expected to result in a proportionate increase in crimes, traffic accidents, and calls for service from the police department.

6.7.2 Fire

The City of Santa Clara has adequately provided fire and other emergency services in the past, and the foundation to continue meeting the City's expanding needs is in place. This foundation consists of fire codes, public fire facilities, highly trained personnel and specialized equipment.

The City of Santa Clara has a good safety record in terms of fire protection and a minimum of fire losses. This record is reflected in the City's excellent fire insurance rating of Class 2. This low level of fire risk is the combined result of the high proportion of new construction which meets current Uniform Building Code standards, and an efficient fire protection service.

It is the mission of the City of Santa Clara Fire Department to protect citizens, businesses, institutions and property within Santa Clara from injury or loss due to natural or man-made disasters. This is accomplished by providing highly trained and equipped personnel to respond to fire, flood, chemical release and medical emergencies. Life saving functions are also performed by the Fire Department's Emergency Medical Services which include rescue, first aid, resuscitation, cardio-pulmonary resuscitation and evacuation.

An acceptable level of fire service requires a timely response of trained personnel and equipment to any emergency. To accomplish this, emergency personnel and equipment are strategically located throughout the City to provide an emergency response within three minutes of notification. Fire stations are strategically distributed throughout the City to reduce response time. If City road networks do not substantially change or do not become too restricted so as to impede emergency traffic, the existing Fire Station locations should adequately serve the City of Santa Clara during the life of this General Plan.

However, increased calls for fire service and traffic congestion can erode the Fire Department's critical response times. To mitigate any impacts, the Fire Department will adjust and/or expand staff and equipment in high areas of service demand and continue its program of placing emergency traffic preemption controls on key signals. Minor increases in staff will also be needed in support services, such as the Hazardous

Materials, Prevention, and Administration divisions. These programs, along with enforcement of Fire Code regulations, will meet the growing fire service needs of the City of Santa Clara.

The Fire Department has extensive fire and hazardous materials mutual aid plans with adjacent cities, county, and State agencies. Mutual aid agreements with surrounding jurisdictions augment the City's fire response capabilities.

A definition of Hazardous Materials and their effects on environmental quality are further described within the Environmental Quality Element.

Fire has been one of the major causes of damage following large earthquakes because of disruption in utility service and access. In cases of extreme widespread emergency throughout the County, such as a major earthquake, mutual aid agreements with other government agencies may limit the usual level of service provided by the City. Citizen cooperation and volunteerism will be highly helpful in protecting the lives of City residents and employees, as well as private property.

6.7.3 Communications

Maintaining an up-to-date public safety communications system is vital to the public safety and welfare of every person, business and institution in the City of Santa Clara. A call for emergency assistance to 9-1-1, "Santa Clara Emergency", is answered by the City of Santa Clara Communications Department. The Dispatch Division maintains the necessary coverage 24 hours per day, 365 days a year.

In the case of an emergency, medical, police or fire call to 9-1-1, the dispatch can be made to the proper responder in less than one minute. By asking key questions regarding the nature of the emergency, persons involved and other important specifics, the dispatcher can determine the amount and type of equipment to send.

To further enhance the capabilities of emergency response teams, future considerations will include upgrading the existing radio and computer system, and the addition of mobile data terminals in certain emergency vehicles. These upgrades will provide greater access to computer based information for all public safety personnel.

6.7.4 Disaster Planning

In cooperation with all governmental levels, the City of Santa Clara has developed a comprehensive and continuing program to protect and educate local residents before, during, and after a natural or technological disaster. The Office of Emergency Services has been created to coordinate emergency preparedness efforts within the City.

To serve in the event of a disaster, an Emergency Operations Center has been constructed as the focal point for collecting and analyzing disaster information to develop the best possible utilization of available resources to mitigate the effects of the disaster. Emergency management operations within the City will integrate existing community resources in the public and private sectors with City-owned resources.

Existing resources in the community will be organized so they can be made available on short notice. The City's Resources Manual inventories local food markets, drug stores,

first aid stations, fuel supplies, transportation resources, contractors, and communications stations. It also lists City personnel who are trained in skills that would be useful in an emergency.

As an emergency supplement to local hospitals which may have a reduced capacity following an earthquake, the City has a packaged disaster hospital with a 200-bed capacity that can be set up in 24 hours. In addition, the materials necessary to establish several first aid stations are stored within the City.

A system of shelters in major public buildings is capable of housing over 30,000 people for short periods. City employees have been trained in shelter management.

To cope with an emergency, the design of the water and electric systems includes some duplication of critical elements and margins of safety to meet short term demands. (For example, the water system can meet peak demands for at least 12 hours with the loss of an electrical substation or the loss of the largest imported water source. Following a complete power failure, the average day demand can still be met for at least 12 hours using stored waters and standby pumps. The City's electric system can sustain the loss of any one substation transformer with no long term loss of service to customers. It can lose two such transformers with only a minimal long term loss of power.) Generally, a disaster probably would not cause complete breakdown of the City's electric system.

6.7.5 Emergency Water Supply

Water agencies have the responsibility of providing sufficient water at adequate pressure to meet domestic demands while maintaining a reserve supply for fire fighting. A breakdown in a portion of the system can leave an area without water, which could result in serious consequences in the even of a fire or other emergency. A back-up water supply from an interagency connection can avert many serious situations.

Since 1980 Santa Clara has installed three automatically controlled interconnections with its two neighboring cities. These interconnections are located at the extreme ends of the respective systems, Kifer Road at Mead Avenue in Sunnyvale, Kifer Road west of Semiconductor Drive in Sunnyvale, and Trimble Road at De La Cruz Blvd in San Jose. This type of connection offers protection to both systems: Pressure control devices at each automatic interconnection ensure that the emergency water needs of one system will be served only from the surplus of the other system. Should both systems simultaneously experience water demands beyond available capacity, the automatic valves would not open, and no water would be exchanged. Although interconnections are no guarantee against water outages, nor can they supply the entire City's water demands, they increase the chances of being able to meet water commitments to customers.

6.7.6 Warning System

The City's emergency warning system is currently comprised of 17 sirens that provide warnings before, during, and after a natural or technological disaster. The sirens were placed before extensive development north of the Bayshore Freeway. With new development and a growing population north of the Bayshore, the City should require installation of sirens in the area to increase the effectiveness of the entire warning system.

6.7.7 Surface Transportation Failure

Santa Clara is bordered or crossed by a number of creeks, a river, railroad tracks, expressways, and freeways. Local roads use bridges and culverts to cross these facilities. These bridges may be severely damaged during a strong quake, crippling the City's transportation network. To reduce the potential for damage, the bridges in Santa Clara are being retro-fitted with seismic restrainers in 1991. In a very severe earthquake where ground movement displaces the bridge foundation, the bridges will sustain such severe damage that they will probably not be usable. Under such a condition, detours or temporary crossing facilities will need to be constructed to accommodate vehicular movement. A complete description of and diagram identifying major transportation facilities within, into and out of the City, can be found within the Transportation Element.

6.7.8 Airport Safety Zone

The Santa Clara County Airport Land Use Commission has determined that the area immediately north of the runway requires special treatment and has established a safety area within the City. Within this area, land uses are generally limited to low intensity storage and industrial uses. An ALUC Referral Boundary (65dB CNEL) and Airport Safety Area Diagram is provided within the Environmental Quality Element under the Major Noise Sources section.

6.8 Goal

The Goal of the Public Facilities and Services Element is to:

Provide and encourage, within economic capabilities, needed facilities and services that contribute to the City's safety, convenience, amenity, educational and cultural enrichment.

6.9 IMPLEMENTATION, POLICIES AND PROGRAMS

6.9.1 IMPLEMENTATION

For those programs which require initiating action following the adoption of this General Plan, the anticipated time period for implementation has been provided, followed by the lead department or other City Group responsible for implementation. Ongoing programs have been so identified, along with the responsible lead department or City group. Implementation will be monitored annually by the Planning Commission for compliance with Federal and State Law requirements.

DEFINITION OF CITY IMPLEMENTATION GROUPS

Arch. Comm.	-	Architectural Committee
Bldg. Div.	-	Building Inspection Division, Planning & Inspection Department
City Council	-	City Council
City Mgr.	-	City Manager's Office
Community Svcs.	-	Community Services Department
Fire Dept.	-	Fire Department
Parks/Rec. Dept	-	Parks and Recreation Department
Planning Div.	-	Planning Division, Planning & Inspection Department

Planning Comm.	-	Planning Commission
Police Dept.	-	Police Department
Public Wks. Dept.	-	Public Works Department
Redev. Agency	-	Redevelopment Agency
Street Dept.	-	Street Department
Water/Sewer Dept.	-	Water and Sewer Utility Department

6.9.2 POLICIES AND PROGRAMS

Administrative, Educational, Cultural and Recreational Policies

1. Continue to develop and encourage educational, cultural and recreational opportunities for residents as demand and financial resources warrant.
2. Continue to maintain precise plans for City functions such as (1) Streets and Highways, (2) Water, (3) Sanitary Sewers, (4) Storm Drainage, (5) Electrical, (6) Street Lighting, (7) Fire Protection, and (8) Parks and Recreation.
3. Help to maintain the recreation areas of closed school sites for continued public use.

Programs

- (i) Develop Capital Improvements Program and Budget for public buildings, grounds, and activities to conform with the General Plan. (Ongoing, City Mgr.)
- (ii) Provide library services that are accessible and of adequate size to serve community residents including provision of library services for citizens of the North of Bayshore neighborhood. (Ongoing, Library Board, City Council)
- (iii) Monitor and evaluate library services annually in order to respond to the changing needs of the community. (Ongoing, Library Board, City Council)
- (iv) Provide a well balanced municipal recreation program that serves all segments of the population. (Ongoing Parks/Rec. Dept.)
- (v) Maintain accessible park facilities within residential areas. (Ongoing, Parks/Rec. Dept.)
- (vi) Support the provision of adequate and effective public and private education facilities within the community. (Ongoing, City Council)
- (vii) Cooperate with local school districts in collecting development impact fees prior to Building Permit issuance for individual projects. (Ongoing, Bldg. Div.)
- (viii) Require housing developers to provide park and recreation facilities where existing facilities are not adequate. Develop standards and criteria for the

amount, type and location of public park and recreation facilities to adequately serve the City's residents. (To be implemented 1992-1995, Planning Div., Parks/Rec. Dept.)

Facilities and Services

Policies

4. Encourage placement of above-ground utility equipment behind public right of ways and screen such equipment from public view as practical, and with consideration of safety and efficiency.
5. Promote access to a high quality cable television service for all residents.

Energy Conservation

Policies

1. Continue an innovative energy program to develop cost effective new power sources and encourage conservation.

Programs

- (ix) Encourage development projects to take maximum advantage of solar heating and cooling opportunities. (Ongoing, Water/Sewer Dept.)
- (x) Encourage the use of renewable energy resources, conservation and recycling programs. (Ongoing, Public Wks. Dept., Street Dept.)

Solid Waste

Policies

7. Maximize solid waste disposal capacity through effective recycling. Meet the State mandated recycling levels of 25 percent by 1995 and 50 percent by 2000. Implement the provisions of the City's Source Reduction and Recycling Element.

Programs

- (xi) Provide a residential curbside recycling program until more effective recycling is provided. (Ongoing, Street Dept.)
- (xii) Utilize the Recyclery Center at the Newby Island landfill or other similar facilities to recycle and direct wastes from landfills. (Ongoing, Public Wks. Dept., Street Dept.)
- (xiii) Construct a solid waste transfer station within the City, and explore providing resource recovery and recycling facilities at the transfer station. (Ongoing, Public Wks. Dept., Street Dept.)

Wastewater

Policies

8. Do not allow new development to exceed the City's share of wastewater treatment capacity at the San Jose/Santa Clara Water Pollution Control Plant.

Programs

- (xiv) Prior to granting zoning approval or permits, review major new industrial,

commercial and residential developments to determine projected wastewater load compared with available sewer capacity. (Ongoing, Water/Sewer Dept.)

**Stormwater
Policies**

9. Maintain the integrity and capacity of the City's stormwater drain facilities.

Programs

- (xv) Require expansion of storm drainage facilities where needed to serve new development. (Ongoing, Public Wks. Dept.)

**Public Safety
Policies**

10. Maximize the use of advanced technology to minimize the effects of man-made and natural hazards on City facilities and services.
11. Attempt to respond to all emergency calls for police and fire within three minutes.
12. Protect citizens, businesses, institutions, and properties within Santa Clara from injury or loss due to natural or man-made disasters.
13. Land uses approved by the City shall be compatible with the safety policies of the Santa Clara County Airport Land Use Commission.
14. Maintain an up-to-date communications system for support of public safety forces.
15. Maintain an up-to-date computer system for support of public safety forces.

Programs

- (xvi) Provide an adequate number of highly trained and equipped personnel to respond to fire, flood, chemical release, and medical emergencies with the established response time. (Ongoing, Fire Dept.)
- (xvii) Place emergency traffic preemption controls on key traffic signals. (Ongoing, Public Wks. Dept.)
- (xviii) Maintain fire and hazardous materials mutual aid agreements with surrounding jurisdictions. (Ongoing, Fire Dept., City Mgr., City Council)
- (xix) Consider upgrades to the radio system to provide more flexibility in meeting public safety communications needs. (Ongoing, Communications Dept., City Mgr.)
- (xx) Examine the feasibility of upgrading the public safety communications computer system to a fully automated Computer Aided Dispatch (CAD) system. (Ongoing, Communications Dept., City Mgr.)
- (xxi) Examine the feasibility of installing Mobile Data Terminals in certain public

safety emergency vehicles to provide field access to the public safety computer system. (Ongoing, Communications Dept., Fire Dept., Police Dept., City Mgr.)

(xxii) Conduct an annual review of Police Department staffing, equipment, and facilities with respect to trends in crime, police response time, historical and forecast population growth, recent development approvals, proposed development, and financial resources. (Ongoing, City Mgr., Police Dept.)

(xxiii) Conduct an annual review of Fire Department staffing, equipment, and facilities with respect to trends in response time, historical and forecast population growth, recent development approvals, proposed development, and financial resources. (Ongoing, City Mgr., Fire Dept.)

Emergency Preparedness Policies

16. Maintain an emergency preparedness plan with an emphasis on providing contingent City services in the event of a disaster.

Programs

(xxiv) Recruit and train citizen volunteers to assist City personnel during extreme and widespread emergencies (such as major earthquakes). (Ongoing, Fire Dept., Police Dept., Emergency Services Coordinator, City Mgr.)

(xxv) Maintain inter-agency water connections for backup supply needed in emergencies. (Ongoing, Water/Sewer Dept., City Mgr.)

(xxvi) Retrofit Santa Clara's bridges with seismic restrainers. (Ongoing, Public Wks. Dept., outside transportation agencies)

(xxvii) Maintain priority list of structures which, because of their unique, irreplaceable historic character, are to be saved from demolition, whenever possible, if damaged by natural disaster. (Ongoing, Bldg. Div., Emergency Services Coordinator, Planning Div.)

(xxviii) Develop methods to reduce non-structural hazards in all buildings for public occupancy (i.e., commercial, retail, institutional and recreational uses as well as public agency facilities). (To be implemented 1992-1995, Emergency Services Coordinator, Fire Dept.)

* * * * *